

March 21, 2024

The Honorable Jeanne Shaheen
Chairwoman
506 Hart Senate Office Building
Washington, DC 20510

The Honorable Hal Rogers
Chairman
2406 Rayburn House Office Building
Washington, DC 20515

The Honorable Jerry Moran
Ranking Member
521 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Matt Cartwright
Ranking Member
2102 Rayburn House Office Building
Washington, DC 20515

Dear Chairwoman Shaheen, Ranking Member Moran, Chairman Rogers, and Ranking Member Cartwright:

As you begin work on the Fiscal Year 2025 (FY25) Commerce, Justice, Science, and Related Agencies Appropriations bill, we write in support of the National Institute for Standards and Technology (NIST) and several of its critical missions.

While fully aware of the tight constraints of the budget agreement, we urge you to provide as much funding as possible to uphold NIST's mission: to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

In concrete terms, this entails funding levels consistent with those authorized in the CHIPS and Science Act:

- **At least \$1.047 billion in funding for NIST's Scientific and Technical Research and Services (STRS) programs** to further advance research projects in key areas, including quantum science and technology, artificial intelligence & Internet of things (IoT).
- **At least \$420 million for NIST's Construction of Research Facilities account** to urgently reduce the nearly \$900 million infrastructure state-of-good-repair backlog, which impacts NIST's ability to provide critical services to industry.

NIST works with our nation's businesses and universities to drive American economic growth and job creation. Companies, academic institutions, and other federal agencies rely on STRS programs to provide foundational research and material development for their products and programs. NIST supports America's global competitiveness by aiding businesses to overcome technical obstacles – fulfilling a vital function that companies cannot do themselves. NIST's core measurement science programs, for example, provide calibrations and standards for industry broadly—from oil and gas to aerospace and medicine.

The agency also plays an essential role in emerging industries, such as quantum technology and artificial intelligence (AI), cybersecurity and digital identity that require foundational measurements to enable U.S. dominance. The National Quantum Initiative Act, which passed with overwhelming bipartisan support in 2018, includes NIST as one of three key agencies that will help ensure the U.S. remains a global leader in quantum. The bill also authorizes the Quantum Economic Development Consortium

(QED-C), a jointly funded government and private sector collaboration designed to tackle some of the challenges of moving quantum technologies from the lab to market.

NIST plays an especially instrumental role in the field of AI. This is exemplified in the recent Executive Order 14110 on Safe, Secure, and Trustworthy Artificial Intelligence, which aims to build U.S. capacity to evaluate and mitigate the risks of AI systems and promoting an innovative, competitive AI ecosystem. The EO mandates NIST to develop meaningful evaluation guidelines, testing environments, and information resources to help organizations develop, deploy, and use AI technologies that are safe and secure, and that enhance AI trustworthiness. It is therefore more urgent than ever that NIST receives proper funding to fulfill its growing responsibilities.

Lastly, modern, functional facilities are required for NIST to remain the world-leader in measurement science. NIST currently has a backlog of over \$900 million in deferred maintenance at their 50+ year-old laboratories in Maryland and Colorado. Recurring failures of these utility systems in recent years have resulted in lost work and costly damage. A study by the National Academies of Sciences, Engineering, and Medicine recommends more than tripling the agency's current construction and maintenance budget annually for at least 12 years. The coalition funding request for FY25 is consistent with the minimum funding recommended by the report.

We believe the critical role NIST plays in supporting advancements in science and technology is worth prioritizing strong investments, even in these tough budgetary times. For FY25 appropriations, we urge increased investment in NIST's core laboratory research programs in the **STRS account at a minimum of \$1.047 billion**. Additionally, we urge Congress to appropriate **\$420 million for NIST facilities**.

Thank you for your consideration, and we look forward to working with you as the appropriations process continues.

Sincerely,

3D Epitaxial Technologies,
LLC

AIM Photonics

Alliance for Trust in AI

American Chemical Society

APS

Atom Computing Inc.

Better Identity Coalition

Bluefors Cryocooler
Technologies Inc.

CJW Quantum Consulting,
LLC

ColdQuanta, Inc. dba
Inflection

Compu Dynamics, LLC

Computing Research
Association

CREOL, The College of Optics
and Photonics at the
University of Central Florida

Elevate Quantum

Florida Photonics Cluster

George Mason University

Global Quantum Intelligence

Global Quantum Intelligence,
LLC

Great Lakes Crystal
Technologies, Inc

HKA Marketing
Communications

HRL Laboratories, LLC

IBM

Keysight Technologies

Leonardo DRS

M-7 Technologies

Maybell Quantum

Menlo Systems Inc.

Microsoft

Montana Instruments

MPW

Northwest Engineering
Solutions LLC

Novum Industria LLC

Optica, Advancing Optics and
Photonics Worldwide

PsiQuantum, Corp.

Qrypt

Quantinuum

Quantum Microwave
Components LLC

Quantum Xchange

Qunnect, Inc

Rigetti Computing, Inc.

Safe Quantum Inc.

SAP America

SEEQC

SPIE, the international
society for optics and
photonics

StratConGlobal

Swain Techs

The Alliance for Digital
Innovation

The Alliance for Digital
Innovation

The University of Texas at
Dallas

Thorlabs Inc.

TOPTICA-USA

University of Colorado
Boulder

Xanadu Quantum
Technologies Inc.

Zyvex Labs